

REMARKS/ARGUMENTS

Reconsideration of the above-identified application is requested in view of the remarks that follow.

In the April 22, 2004, Office Action, the Examiner rejected claims 19-21 under 35 U.S.C. §103(a) as being unpatentable over the Lu et al. '324 patent in view of the Janssen et al. patent publication. Claim 22 was rejected under 35 U.S.C. §103(a) as unpatentable over the Lu et al. reference in view of the Janssen et al patent publication, and further in view of the Kaneko '588 patent. Claim 23 was rejected under 35 U.S.C. §103(a) as unpatentable over the Lu et al. patent in view of the Janssen et al. patent publication, and further in view of the Takamira et al. '418 patent.

As indicated above, claims 19-23 have been cancelled; new claims 24-28 have been added. For the reasons set forth below, it is believed that new claims 24-28 patentably distinguish over the reference combinations cited by the Examiner.

Applicant's new independent claim 24 recites a silicon-backed microdisplay that includes a silicon side and a glass side and which improves the work function balance of the device. More specifically, new independent claim 24 recites that the silicon side of the microdisplay includes a silicon substrate, a silicon-side conductive layer disposed directly on the silicon substrate, and a silicon-side passivation layer, between 2000-6000 angstroms thick, disposed directly on the silicon-side conductive layer. The glass side of the claim 19 microdisplay comprises a cover glass, a glass-side conductive layer disposed directly on the cover glass, and a glass-side passivation layer that is disposed directly on the glass-side conductive layer and that is 300-900 angstroms thick and comprises a material selected from a group of oxides listed in claim 19.

That is, new independent claim 24 defines a silicon-backed microdisplay that has a silicon substrate side having specific physical features that have specific physical relationships with one another; the glass side of the claim 24 microdisplay structure also has specific physical characteristics that have a specific physical relationship with one another. As recited in claim 24, the combination of specific physical characteristics and physical relationships, both

individually on the silicon substrate side of the microdisplay structure and on the glass side of the microdisplay structure, and in the combination of the silicon substrate side and the glass side structures, results in a work function balance for the overall microdisplay structure that is in the range of approximately 0.2-0.4eV, an improvement over the conventional work balance function for silicon-backed microdisplay devices.

Upon careful review of the both the Lu. Et al. patent and the Janssen et al. patent publication, Applicant continues to be of the good faith belief that the references, whether considered individually or in combination, neither teach nor suggest the specific silicon-backed microdisplay device structure having the work function balance recited in Applicant's new independent claim 24. At best, the Examiner has culled individual features from multiple references and combined them, without any clear motivation from any of the references to do so, with the impermissible hindsight benefit provided by applications specification.

Furthermore, Applicant's new dependent claims recite further specific features of the claim 24 microdisplay device that are neither taught nor suggested by the cited references. For example, new claim 27 recites that the glass-side conductive layer formed directly on the glass sheet includes Indium-Tin-Oxide and has a characteristic resistance in the range of 100-500 ohms/square and a light transmissivity of 90% or greater. New claim 28 recites that the combination of the glass-side passivation layer formed directly on the glass-side conductive layer and the glass-side conductive layer formed directly on the glass sheet has an overall transmissivity of 90% or greater and a reflectivity of less than 1%.

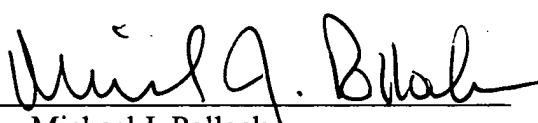
For the reasons set forth above, Applicant believes that all claims currently pending in this application patentably distinguish over the prior art. Therefore, it is requested that this amendment be entered and that the application be passed to allowance.

Respectfully submitted,

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